

REMARKS/ARGUMENTS

The Office Action has been received and reviewed. Claims 46, 48-56, 58-67, and 69-80 are currently pending. Claims 46, 56, 67 and 77 have been amended. Support for the amendments may be found at paragraph 41 of the Specification. Reconsideration of the application is respectfully requested in view of the above amendments and following remarks.

Claim Rejections under 35 USC § 103(a)

Claims 46, 48-66, 67-77, 79 and 80 were rejected under 35 USC § 103(a) as being unpatentable over Müller (U.S. Patent No. 6,845,238) in view of Jetzek et al. (U.S. Patent No. 6,546,252) and further in view of Shohara (U.S. Patent No. 6,463,266). Claim 78 was rejected under 35 USC § 103(a) as being unpatentable over Müller in view of Jetzek, Shohara and further in view of Vihriala (U.S. Patent No. 6,956,895). Applicants respectfully traverse.

In particular, Applicants submit that amended claims 46, 56, 67 and 77 and associated dependent claims are patentable over the cited prior art references for the reasons set forth below. For convenience, only independent claim 46 is reproduced and will be discussed in detail herein. Independent claims 56, 67 and 77 recite substantially similar subject matter as the representative independent claim 46 and are thus patentable over the cited prior art references for substantially similar reasons as those set forth herein in connection with claim 46.

Amended claim 46 recites a method comprising:

- obtaining frequency estimation information from a first wireless signal received from a first carrier in a first communication system;
- performing a handover to a second carrier in a second communication system distinct from the first communication system; and
- configuring a frequency tracking loop for receiving a second wireless signal from the second carrier as a function of the frequency estimation information;
- wherein the frequency estimation information comprises a frequency offset for the first wireless signal; and
- wherein configuring the frequency tracking loop includes

calculating a ratio of an ideal frequency of the first carrier to an actual frequency of the first wireless signal received from the first carrier, and

using the frequency ratio to convert the frequency offset for the first wireless signal to a frequency offset for the second wireless signal.

Applicants respectfully submit that Müller, Jetzek, Shohara and other references, taken alone or in the alleged combination, fail to render obvious claims of the present application.

In particular, Müller discloses a mechanism for performing an inter-frequency and/or inter-system call handover in a cellular communication system (see col. 4, ll. 6-12). Müller however does not disclose that the handover process involves obtaining frequency estimation information, including frequency offset, from a first wireless signal received from a first carrier in a first communication system and configuring a frequency tracking loop for receiving a second wireless signal from a second carrier in a second communication system as a function of the frequency estimation information. Furthermore, Müller does not disclose that configuring the frequency tracking loop includes calculating a ratio of an ideal frequency of the first carrier to an actual frequency of the first wireless signal received from the first carrier. Moreover, Müller does not disclose that the frequency ratio is used to convert the frequency offset for the first wireless signal to a frequency offset for the second wireless signal, as claimed herein. Additionally, with regard to claim 77, Müller does not disclose that the frequency ratio is used to convert the frequency error for the first wireless signal to a frequency offset for the second wireless signal, as claimed herein.

Jetzek discloses a mechanism for performing an inter-frequency handover of a call within a cellular communication system. To perform a handover between first and second frequencies, Jetzek determines a quality offset of a second frequency over a first frequency (see col. 5, ll. 35-44). The quality offset is determined based on power level offset, signal-to-noise ratio, received signal strength, delay, bit error rate and frame error rate (see col. 5, ll. 1-9). First, Applicants note that "quality offset" and "frequency offset" are completely different concepts and that a determination of a "frequency offset," as used in the present application, is not mentioned in Jetzek. Second, Jetzek does not disclose or even suggest configuring a frequency tracking loop for receiving a second wireless signal from the second carrier as a function of frequency offset,

and that such configuring includes calculating a ratio of an ideal frequency of the first carrier to an actual frequency of the first wireless signal received from the first carrier. Moreover, Jetzek does not disclose that the frequency ratio is used to convert the frequency offset for the first wireless signal to a frequency offset for the second wireless signal, as claimed herein. Additionally, with regard to claim 77, Jetzek does not disclose that the frequency ratio is used to convert the frequency error for the first wireless signal to a frequency offset for the second wireless signal, as claimed herein.

Shohara discloses an automatic frequency control (AFC) mechanism applied to downlink and uplink signals based on frequency errors of received sample signals. In particular, a digital phase rotator performs successive complex phase rotations on the received sample signal bursts to obtain receive frequency errors (see col. 9, ll. 14-60). An AFC feedback control signal based on measured receiver frequency error is applied as a frequency offset command to the downlink phase rotator to null receiver frequency error (see col. 5, ll. 41-44). The frequency offset command to the downlink phase rotator is scaled by an appropriate constant and applied to the uplink phase rotator as a transmitter frequency offset command to null the transmitter frequency error as well (see col. 5, lines 45-50). In contrast to the claimed subject matter, the downlink and uplink signals of Shohara are of the same frequency, same carrier and same GSM system (see col. 19, ll. 20-21). Furthermore, Shohara does not disclose or even suggest that a frequency offset for the second signal (i.e., uplink signal) is calculated based on a ratio of an ideal frequency to an actual frequency of the first signal (e.g., downlink signal) from a different carrier, as claimed herein.

Accordingly, for at least these reasons, Müller, Shohara, Jetzek and other cited prior art references fail to obviate the recited subject matter and the rejected claims should be allowed.

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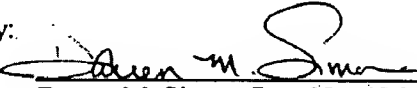
CONCLUSION

In light of the amendments contained herein, Applicants submit that the application is now in condition for allowance, for which early action is requested.

Please charge any fees or overpayments that may be due with this response to Deposit Account No. 17-0026.

Respectfully submitted,

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